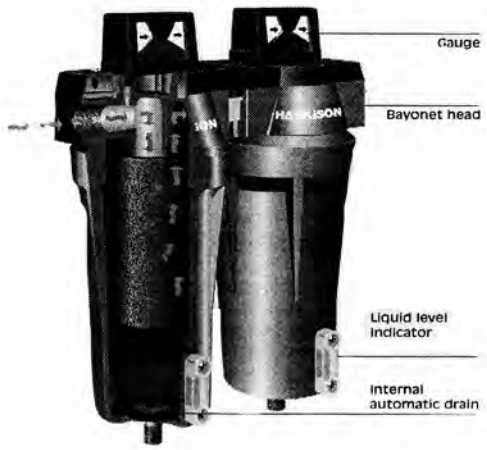
DESCRIPTION:

The Medical Air Coalescing Filter is designed for removal of ultra-fine oil aerosols and solid particles to 0.01 micron from the medical air stream. The filter housing is a modular design which allows greater flexibility for installation than previous designs. The modular housing allows filters to be mounted for left or right entry and are field gangable with optional kits.

The Medical Air Coalescing Filter is constructed from high quality aluminum, zinc and steel. The interior and exterior of each filter housing is chromated and epoxy powder coated for added durability and corrosion resistance. All housings are rated for an operating pressure up to 300 psig (21 kgf/cm^2) and tested with a 5:1 safety factor. The filter is supplied with factory installed color differential pressure gauge, liquid level indicator and internal automatic float drain. The filters are available with optional external electronic automatic solenoid drain.

The Medical Air Coalescing Filter uses a two-stage filtration design that maximizes efficiency and extends the life of the element. The first stage of filtration uses a coated, closed ell foam sleeve that acts as a prefilter and flow dispenser. The second stage utilizes multiple layers of matrix blended fiber media for ultra-high coalescence, removing oil aerosols and solid particles to 0.01 micron. The large effective surface area of the element ensures high efficiencies while minimizing pressure drop. Each coated, closed cell foam sleeve resists chemical attack from oil and acids, contains no silicone and can withstand temperatures up to 150ºF (66ºC). The maximum inlet liquid load is 100 ppm w/w, with a maximum remaining oil content of 0.001 ppm w/w. The maximum pressure drop at rated flow for dry conditions is 2 psid (0.14 kgf/cm^2) and for wet conditions is 6 psid (0.42 kgf/CM^2).



ELEMENTS:

- Ultra-fine oil aerosols and solid particle removal to 0.01 micron.
- Two-stage filtration increases efficiency.
- Modular filter housings simplify installation.
- Push-on filter elements.

ALL PART NUMBERS PREFIXED BY #32-

Catalog #	Quantity	Model #	SCFM @ 100psig (m^3/min @ 7 kgf/cm^2)	Connection Size	Replacement Element	Quantity of Elements
63-19-2020		HF7124DGL	20 (0.57)	1/2" NPTF	63-90-2020	
63-19-2021		HF7164DGL	35 (1.00)	1/2" NPTF	63-90-2021	
63-19-2022		HF7204DGL	60 (1.72)	1/2" NPTF	63-90-2022	
63-19-2023		HF7248DGL	100 (2.9)	1" NPTF	63-90-2023	
63-19-2024		HF9288DGL	170 (4.9)	1" NPTF	63-90-2024	

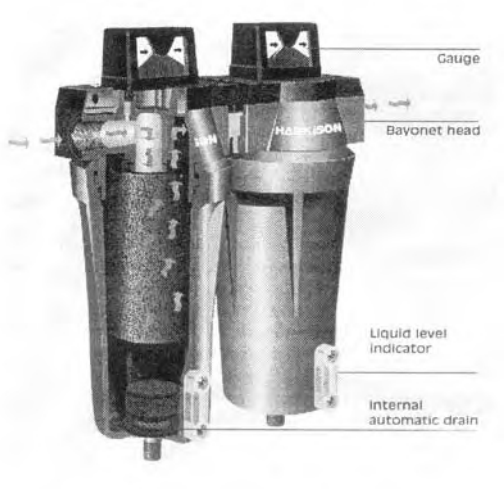
Medical Air/1 Micron Line Filter

DESCRIPTION:

The Medical Air 1 Micron Line Filter is designed for removal of liquids and solid particles from the medical air stream. The filter housing is a modular design which allows greater flexibility for installation than previous designs. The modular housing allows filters to be mounted for left or right entry and are field gangable with optional kits.

The Medical Air 1 Micron Line Filter is constructed from high quality aluminum, zinc and steel. The interior and exterior of each filter housing is chromated and epoxy powder coated for added durability and corrosion resistance. All housings are rated for an operating pressure up to 300 psig (21 kgf/cm^2) and tested with a 5:1 safety factor. The filter is supplied with factory installed color differential pressure gauge, liquid level indicator and internal automatic float drain. The filters are available with optional external electronic automatic solenoid drain.

The Medical Air 1 Micron Line Filter uses a two-stage filtration design that maximizes efficiency and extends the life of the element. The first stage of filtration captures larger particles with alternate layers of fiber media and media screen. The second stage coalesces aerosols and captures solid particles with multiple layers of epoxy bonded, blended fiber media. The large effective surface area of the element ensures high efficiencies while minimizing pressure drop. Each coated, closed cell foam sleeve resists chemical attack from oil and acids, contains no silicone and can withstand temperatures up to 150ºF (66ºC). The maximum inlet liquid load is 2,000 ppm w/w, with a maximum remaining oil content of 1 ppm w/w. The maximum pressure drop at rated flow for dry conditions is 1 psid (0.07 kgf/cm^2) and for wet conditions is 2 psid (0.14 kgf/cm^2).



ELEMENTS:

- Liquid removal plus 1 micron filtration.
- Two-stage filtration increases efficiency.
- Modular filter housings simplify installation.
- Push-on filter elements.

ALL PART NUMBERS PREFIXED BY #32-

Catalog #	Quantity	Model #	SCFM @ 100psig (m^3/min @ 7 kgf/cm^2)	Connection Size	Replacement Element	Quantity of Elements
63-19-2020		HF7124DGL	20 (0.57)	1/2" NPTF	63-90-2020	
63-19-2021		HF7164DGL	35 (1.00)	1/2" NPTF	63-90-2021	
63-19-2022		HF7204DGL	60 (1.72)	1/2" NPTF	63-90-2022	
63-19-2023		HF7248DGL	100 (2.9)	1" NPTF	63-90-2023	
63-19-2024		HF9288DGL	170 (4.9)	1" NPTF	63-90-2024	

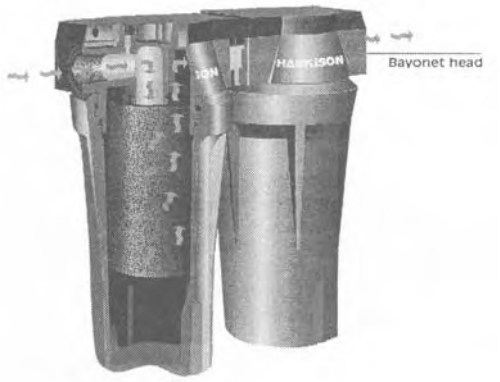
Medical Air/Oil/Vapor Filters

DESCRIPTION:

The Medical Air/Oil/Vapor Removal Filter is designed as the final stage of filtration for the medical air stream. The activated carbon filter removes oil vapors for odorless and taste-free medical air. The filter housing is a modular design which allows greater flexibility for installation than previous designs. The modular housing allows filters to be mounted for left or right entry and are field gangable with optional kits.

The Medical Air/Oil/Vapor Removal Filter is constructed from high quality aluminum, zinc and steel. The interior and exterior of each filter housing is chromated and epoxy powder coated for added durability and corrosion resistance. All housings are rated for an operating pressure up to 300 psi (21 kgf/cm^2) and tested with a 5:1 safety factor. The filter does not require a differential pressure indicator as only vapors are absorbed by the element. Elements are rated for 1,000 hours of life. No liquids should be present at this level of filtration and, therefore, no drain is required (liquids are removed by filters upstream).

The Medical Air/Oil/Vapor Removal Filter uses a two-stage filtration design that maximizes efficiency and extends the life of the element. The first stage of filtration uses a stabilized bed of finely divided particles that remove the majority of oil vapors. The second stage utilizes multiple layers of fiber media with bonded microfine carbon particles that remove any remaining oil vapors. The multiple layers of fine media prevent particle migration. Each coated, closed cell foam sleeve resists chemical attack from oil and acids, contains no silicone and can withstand temperatures up to 150ºF (66ºC). The maximum inlet liquid load is 0 ppm w/w, with a maximum remaining oil content of 0.003 ppm w/w. The maximum pressure drop at rated flow for dry conditions is 1 psid (0.7 kgf/cm^2) and for wet conditions is not applicable as no liquid should be present.



ELEMENTS:

- Final stage in oil-free medical air filtration.
- Modular filter housings simplify installation.
- Push-on filter elements.
- Activated carbon filter provides odorless and taste-free medical air.

ALL PART NUMBERS PREFIXED BY #32-

Catalog #	Quantity	Model #	SCFM @ 100psig (m^3/min @ 7 kgf/cm^2)	Connection Size	Replacement Element	Quantity of Elements
63-19-4020		HF4124	20 (0.57)	1/2" NPTF	63-90-4020	
63-19-4021		HF1164	35 (1.00)	1/2" NPTF	63-90-4021	
63-19-4022		HF1204	60 (1.72)	1/2" NPTF	63-90-4022	
63-19-4023		HF1248	100 (2.9)	1" NPTF	63-90-4023	
63-19-4024		HF1288	170 (4.9)	1" NPTF	63-90-4024	

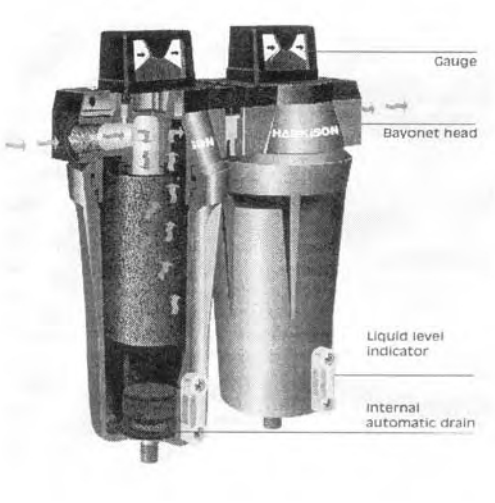
Medical Air Separator/Filter

DESCRIPTION:

The Medical Air Separator/Filter is designed for removal of bulk liquids and large particles from the medical air stream. The filter housing is a modular design which allows greater flexibility for installation than previous designs. The modular housing allows filters to be mounted for left or right entry and are field gangable with optional kits.

The Separator/Filter is constructed from high quality aluminum, zinc and steel. The interior and exterior of each filter housing is chromated and epoxy powder coated for added durability and corrosion resistance. All housings are rated for an operating pressure up to 300 psig (21 kgf/cm2) and tested with a 5:1 safety factor. The filter is supplied with factory installed color differential pressure gauge, liquid level indicator and internal automatic float drain. The filters are available with optional external electronic automatic solenoid drain.

The Separator/Filter uses a two-stage filtration design that maximizes efficiency and extends the life of the element. The first stage of filtration is accomplished by use of two stainless steel orifice tubes that provide 10 micron mechanical separation. The second stage consists of matrix blended fiber media coalesce that captures solid and liquid particles to 3 microns and larger. The large effective surface area of the element ensures high efficiencies while minimizing pressure drop. Each coated, closed cell foam sleeve resists chemical attack from oil and acids, contains no silicone and can withstand temperatures up to 150'F (66°C). The maximum inlet liquid load is 25,000ppm w/w, with a maximum remaining oil content of 5ppm w/w. The maximum pressure drop at rated flow for dry conditions is 1 psid (0.07 kgf/cm^2) and for wet conditions is 1.5 psid (0.11 kgf/cm^2).



ELEMENTS:

- Bulk liquid removal plus 3 micron filtration
- Two-stage filtration increases efficiency
- Modular filter housings simplify installation
- Push-on filter elements

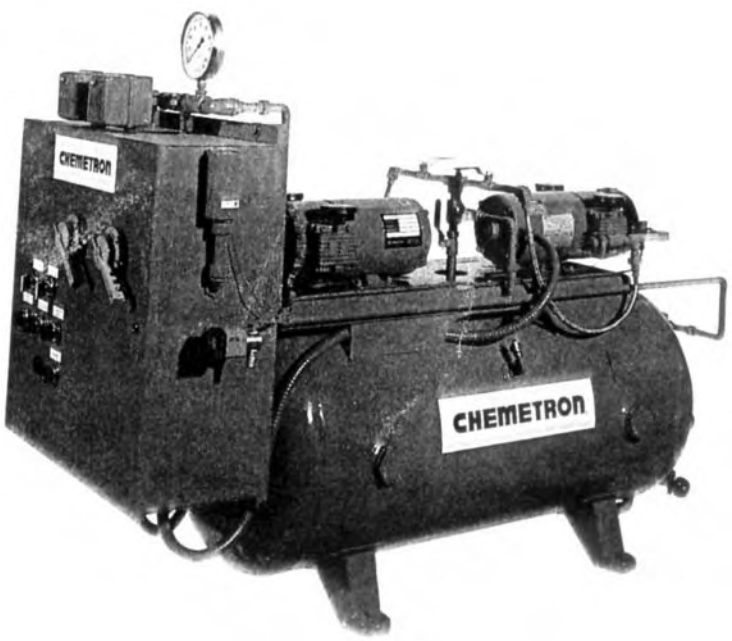
ALL PART NUMBERS PREFIXED BY #32-

Catalog #	Quantity	Model #	SCFM @ 100psig (m^3/min @ 7 kgf/cm^2)	Connection Size	Replacement Element	Quantity of Elements
63-19-1020		HF9124DGL	20 (0.57)	1/2" NPTF	63-90-1020	
63-19-1021		HF9164DGL	35 (1.00)	1/2" NPTF	63-90-1021	
63-19-1022		HF9204DGL	60 (1.72)	1/2" NPTF	63-90-1022	
63-19-1023		HF9248DGL	100 (2.9)	1" NPTF	63-90-1023	
63-19-1024		HF9288DGL	170 (4.9)	1" NPTF	63-90-1024	

Medical Air Compressor Systems/Packaged Oil-less

Standard System Features:

- UL listed control system mounted in a NEMA 12 rated cabinet.
- PTFE piston rings.
- Electric alternator cycles lead compressor with each use.
- Medical air receiver constructed per ASME standards. Includes auto & manual drain, 3 valve bypass, sight glass and pressure relief valve.
- No water required for cooling.
- Totally oil-less compressors supply oil-less medical air per NFPA standards.
- Complies with NFPA 99 standards
- Lag compressor on alarm with auxiliary contacts for connection to master alarm.
- High medical air temperature shutdown switch included on each compressor, wired to control panel with auxiliary contacts for connection to master alarm.
- Copper/ brass piping and fittings on all pressurized connections.
- Two plumbing and one major electrical connection.



Description

The Chemetron Medical Compressed Medical air System is designed for superior performance and quality. The medical air systems are designed to meet or exceed NFPA 99 recommended guidelines for medical air systems. All systems are piped and wired for single point connection. The standard system includes a control panel complete with full-size NEMA rated starters and alternating controls. Systems are available in simplex and all multiplex arrangements. The medical air systems are available in the following standard configurations.

- Tank-mounted
- Base mounted with vertical receiver
- Stack mounted for limited space applications
- Modular system with individual components for limited access installations

The medical air compressors are an air-cooled, oil-less design for supply of clean, high quality medical air to the medical/surgical air system. Each compressor utilizes grease packed, sealed-for life bearings and PTFE piston rings to provide reliable operation without conventional lubrication of crankcase and cylinder walls. Durability and long life are ensured by low lift stainless steel valves and anodized valve plates with aerodynamic valve ports. Dual cooling from standard flywheel and integral radial fan optimizes cooling of the units surface. All models operate at 72 - 78 dBA. The V-belt drive is enclosed by an OSHA-compliant belt guard. Each compressor discharge is equipped with a shutoff valve and a high air temperature shutdown switch wired to the system control panel. Each system control panel includes factory mounted hour meters to monitor factory recommended service intervals, as well as running lights to indicate compressor in operation.

Each compressor is driven by a ball bearing, 40° C rise, standard design induction motor with 1.15 service factor.

The system's electrical controls are mounted in a NEMA 12 control cabinet, UL listed as a system. The standard controls include the following features:

- Combination type panel, with circuit breaker disconnects and across the line magnetic motor starters with three phase overload protection and under voltage release.
- An automatic alternator to cycle lead compressor with each use.
- Hands-Off-Automatic Selector switches.
- Lag Compressor In-Use indicator light with horn and connection for remote annunciation.
- High-Air-Temperature Shutdown indicator lights with horn and connection for remote annunciation.
- Compressor running lights indicating compressor in operation.
- Hour meters to monitor factory recommended service intervals.

The system includes properly sized inlet and discharge flex connectors and vibration isolation pads for field installation. As an option, the system can be supplied with properly sized intake filters with minimum 10 micron filtration for either rooftop or inline mounting.

The system includes one ASME coded medical air receiver with a 4-1/2" pressure gauge, safety relief valve, automatic and manual tank drain, sight gauge glass and three-valve bypass.

Start-up and in-service instruction is provided by a factory trained technician. The entire system is warranted for 12 months after start-up or 18 months from shipment (whichever comes first).

CALL FOR ORDERING INFORMATION

	DUPLEX UNITS								
	Model Number	HP		Receiver Size		SCFM Delivery @ 50 psig		SCFM Delivery @ 100 psig	
Part Number		Each	Total	(gals)	RPM	Each	Total	Each	Total
#32-61-12-2001	DAPOL1-120T	1	2	120	950	4	8	3.6	7.2
#32-61-12-2002	DAPOL1.5-120T	1.5	3	120	550	6.5	13	5.7	11.4
#32-61-12-2003	DAPOL2-120T	2	4	120	700	8.2	16.4	7.3	14.6
#32-61-12-2004	DAPOL3-120T	3	6	120	1075	11.9	23.8	11	22
#32-61-12-2005	DAPOL5-120T	5	10	120	900	20.5	41	18.1	36.2
#32-61-12-2006	DAPOL7.5-120T	7.5	15	120	900	30.4	60.8	28	56
#32-61-12-2007	DAPOL10-120T	10	20	120	1100	37	74	34.7	69.4
#32-61-12-2008	DAPOL15-120T	15	30	120	1325	60.5	121	56.1	112.2
#32-61-12-2009	DAPOL20-120T	20	40	120	1200	78	156	73	146

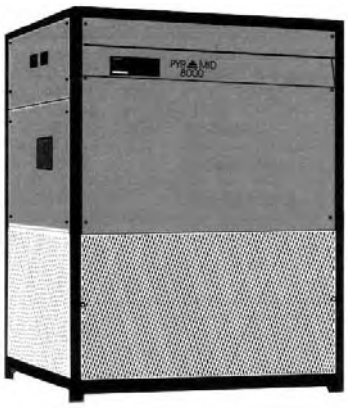
	TRIPLEX UNITS								
	Model Number	HP		Receiver Size		SCFM Delivery @ 50 psig		SCFM Delivery @ 100 psig	
Part Number		Each	Total	(gals)	RPM	Each	Total	Each	Total
#32-61-12-3005	TAPOL5-120B	5	15	120	900	20.5	61.5	18.1	54.3
#32-61-12-3006	TAPOL7.5-120B	7.5	22.5	120	900	30.4	91.2	28	84
#32-61-12-3007	TAPOL10-120B	10	30	120	1100	37	111	34.7	104.1
#32-61-12-3008	TAPOL15-120B	15	45	120	1325	60.5	181.5	56.1	168.3
#32-61-12-3009	TAPOL20-120B	20	60	120	1200	78	234	73	219

	QUADRAPLEX UNITS								
	Model Number	HP		Receiver Size		SCFM Delivery @ 50 psig		SCFM Delivery @ 100 psig	
Part Number		Each	Total	(gals)	RPM	Each	Total	Each	Total
#32-61-12-XXXX	QAPOL5-120B	5	20	120	900	20.5	82	18.1	72.4
#32-61-12-XXXX	QAPOL7.5-120B	7.5	30	120	900	30.4	121.6	28	112
#32-61-12-XXXX	QAPOL10-240B	10	40	240	1100	37	148	34.7	138.8
#32-61-12-XXXX	QAPOL15-240B	15	60	240	1325	60.5	242	56.1	224.4
#32-61-12-XXXX	QAPOL20-240B	20	80	240	1200	78	312	73	292

Please Note: XXXX = Part Numbers will be issued at time of order.

Elements:

- Delivers 100% of purified inlet air as clean, safe breathing air.
- Meets or exceeds OSHA and NFPA standards for breathing air.
- Convenient, easily observed instrument panel for monitoring the refrigeration section of the unit.
- Installation is complete with air, electric and condensate drain connections.



Description:

Compressed medical air purifiers are designed to provide a continuous supply of clean, safe breathing air by reducing the concentration of oil, water, particulates and carbon monoxide in the airstream. Every purifier is a complete, full-capacity purification system.

Purifiers are required where the quality of intake air is unreliable and may exceed NFPA specified contaminant levels for medical air. They provide drying and filtration as required by NFPA 99 (two units are required under 4.3.1.1.9).

The system consists of a refrigerated chiller to produce a 33'F - 39'F pressure dew point; a multi-stage coalescing filter to remove oil, water and particulates; a charcoal filter to remove tastes and odors; a catalytic converter to convert carbon monoxide to carbon dioxide; and a particulate final filter to remove fine particles. The air purifier is quickly installed with simple air, electric and condensate drain connections.

Electronic monitoring is achieved locally with front panel indicators and alarms that can be relayed to a remote central control station.

Quarter-turn fasteners attach protective panels and screens that can be removed and replaced quickly during servicing.

The system operation monitor makes the purifier easy to use, maintain, and troubleshoot. The monitor not only measures and digitally displays critical medical air and refrigerant temperatures, but also controls the removal of condensate from the purifier. The display signals when air system conditions may affect the purifier's performance.

Pyramid 8000 is a registered trademark of Deltech Engineering, L.P.

Add Prefix #32 to Catalog Number

Catalog Number	Model	Rated Capacity* (scfm)	Electrical Service (V/PH/HZ)	Full Load Amps**	Approximate Dimensions			Air Line Connections (In NPT)	Approx. Ship Wt. (lbs.)	#
					W	H	D			
63-20-0002	8DM25	25	115/1/60	5	24	45	24	1/2	205	
63-20-0003	8DM50	50	115/1/60	10	30	45	30	3/4	390	
63-20-0006	8DM75	75	208-230/1/60	7	30	45	30	3/4	390	
63-20-0004	8DM100	100	208-230/1/60	7	36	55	36	1	700	
63-20-0005	8DM150	150	208-23-/1/60	10	36	55	36	1	700	

* Rating conditions are 100°F inlet temperature, 100 psig inlet pressure, 100% inlet relative humidity and 100°F ambient temperature.

** At rating conditions. Maximum inlet air temperature 120°F. Maximum operating pressure 150psig. Maximum inlet CO 400 ppm, minimum inlet O_2 concentration.
concentration 20%.